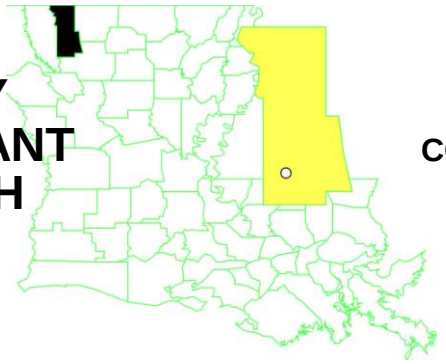
LOUISIANA ARMY AMMUNITION PLANT
WEBSTER PARISH
LOUISIANA



EPA REGION 6
CONGRESSIONAL DISTRICT 04

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Background

The former Louisiana Army Ammunition Plant (LAAP) is located near Doyline, Louisiana in Webster and Bossier Parishes. The plant is bounded by US Highway 80 to the north, US Highway 164 to the south, Dorcheat Bayou to the east and by Clarke Bayou to the west. The cities of Shreveport and Bossier City are located approximately 22 miles west of the installation and the towns of Dixie Inn and Minden are located just to the northeast. LAAP was a military installation comprising approximately 14,949 acres of land.

In 1941, the U.S. government acquired ownership of the site. LAAP was a U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) installation that was used to load, assemble, and pack ammunition items. Operations began in 1942 with eight ammunition lines and one ammonium nitrate graining plant. Ammunition production ceased in August 1945 at the close of World War II and the facility was placed in a standby status. It was reactivated in February 1951 to support the Korean conflict and all ammunitions loading lines were operational including a metals forging and machining plant area known as the Y-Line Chromic Acid Etching Facility. The Y-Line was used to manufacture 155-mm projectiles. In February 1958, the installation was again placed in standby status. In September 1962, the plant was reactivated in support of the Vietnam war with four production areas used for classified ammunition items. The LAAP installation continued ammunition production for the U. S. military until 1994. In October 1997, the Y-Line facility was leased to Valentech Corporation.

The 16 one-acre pink water lagoons known as Area P Lagoons were in active use between 1940 and 1981. During this time, untreated explosives-laden wastewater from industrial operations was collected in concrete sumps at each of the various load line areas, hauled by tanker trucks to Area P, and emptied into the lagoons. After numerous investigations and assessments, it was determined that the nitroaromatic contamination in soils and sediments from the Area P lagoons was a major contributor to the groundwater nitroaromatic contamination.

To protect the shallow groundwater below the Area P Lagoons (Operable Unit (OU) 1) from leaching through nitroaromatic contaminated soil into the groundwater, an Interim Remedial Action (IRA) was conducted in 1987 through 1990. Actions at Area P included draining and treating lagoon wastewater, soil excavation, and soil treatment by incineration. Soil in the lagoons and surrounding area was excavated. The IRA resulted in the incineration of 101,929 tons of soil and the treatment of 53,604,490 gallons of wastewater and rain water. The Area P Lagoons and surrounding area, were then backfilled with the incinerated soil, covered with a minimum 2-foot thick cap of compacted clay, and re-vegetated with Bermuda grass. A four-strand barbed wire fence, 4-feet in height, was installed around the cap and is posted with warning signs. In September 1996 following completion of the IRA, a ROD was prepared.

The ROD for OU1 determined that no potential human health or ecological risks were associated with the soils and therefore, No Further Action (NFA) was required. The NFA also applied to six other study areas which included LAAP OU2 through 7 (LAAP OU2 Burning Ground No. 5, LAAP OU3 M-4 Waste Water Lagoon, LAAP OU4 Burning Ground No. 8 Landfill, LAAP OU5 Landfill No. 3, LAAP OU6 Oily Waste Landfarm, and LAAP OU7 Burning Ground No. 8 Pink Water Lagoons). These study areas were identified by the USEPA as the Soil/Source OU. The ROD for LAAP OU8, Y-Line Chromic Acid Etching Facility (Y-

Line) determined that no remedial action was necessary to ensure protection of human health and the environment under an industrial use scenario.

As of January 2005, the facility was transferred to the State of Louisiana (now called Camp Minden) and the use of former LAAP areas remain as military/industrial as specified in the RODs, and therefore meet the NFA recommendation.

The area surrounding the former LAAP is primarily rural with several small towns located in the near vicinity. Based on the 2004 U.S. Census Bureau population estimates, the town of Minden, approximately 2 miles northeast of the installation has an estimated population of 13, 281 while the closest town, south and immediately adjacent to the facility, is the village of Doyline with a population of approximately 832 people.

Current Status

- Ground water and soil data were evaluated in support of the installation-wide ground water operable unit and a Record of Decision was signed in August 2007. Ground water monitoring activities are ongoing.
- In 2009 through 2010, the US Army, under the Military Munitions Response Program (MMRP), conducted a Remedial Investigation/Feasibility Study for areas where explosives and munitions constituents could be a concern requiring potential response. Initial field activities were conducted in February and July 2009. The US Army conducted a public meeting in May 2010 to discuss the MMRP Proposed Plan. A Record of Decision was signed in 2010. No further action, other than continuing O&M activities that include maintaining land use controls (LUCs) is required for this site. The site has reached the construction completion/remedy in place stage. (Construction Completion No. 1098)
- A Five-Year remedy review was completed in June 2006 on areas previously evaluated and found the remedy is protective of human health and the environment.
- The US Army started to conduct a new Five-Year review in 2010 and was completed as of July 15, 2011. As part of this effort a site inspection was conducted on June 23, 2010.

Benefits

The incineration of wastes and contaminated soils at the Louisiana Army Ammunition Plant site reduced the potential for exposure to hazardous substances for site workers and future reuse of the property. The Army conducted further investigations, which will lead to further reductions in contaminants, thereby further protecting the public health and the environment.

National Priorities Listing (NPL) History

Proposed Date:	October 15, 1984
Final Date:	March 31, 1989
Construction Completion Date	September 30, 2010

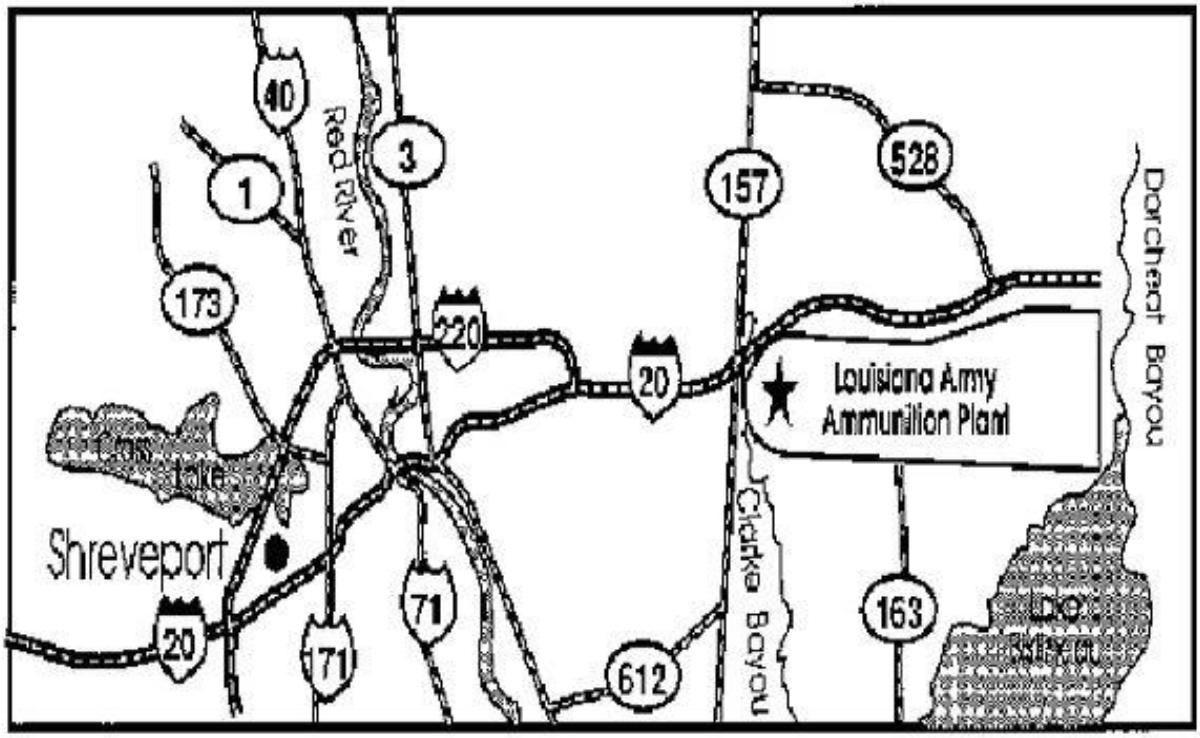
Location: South of Interstate Highway 20 in Bossier and Webster Parishes, 22 miles east of Shreveport.

Population: Approximately 10,250 people live in this predominantly agricultural area, within 2 miles of the site.

Setting: The closest drinking water well is a distance of 1,968 feet from the site boundaries.

The initial Hazard Ranking System ranking was based on 16 one-acre pink water lagoons known as Area P. The total installation was listed on the National Priorities List and covers 14,974 acres of level to slightly rolling forest land near the towns of Minden and Doyline.

Site Map



Principal Pollutants:

- The shallow ground water is contaminated by explosive wastes including the explosives, cyclotrimethylenenitramine (RDX) up to 27,000 parts per billion (ppb) and trinitrotoluene (TNT) up to 25,000 ppb.

- The Army incinerated 150,000 tons of explosive contaminated soils and sludges from Area P. Contaminated soils from other operable units have been addressed in the Feasibility Study for the first 7 study areas and the Y-line. Site investigation is on-going for soil contamination at other load lines and test areas. The most likely potential contaminants include volatiles, explosive compounds and metals. Groundwater is being investigated as a separate operable unit for the same contaminants of concern.

Health Considerations

Shallow contaminated aquifer is hydraulically connected with the deep Wilcox aquifer used by the facility as a potable water supply.

Record of Decision (ROD)

Signed: Interim Response Action - 01/31/89, Area P only. Approved with signatures on Federal Facility Agreement (FFA)

ROD-OU2
Signed: March 4, 1997, Soil/Source Operable Unit of Seven Study Areas only.

ROD-OU3
Signed: May 19, 2000, Y-Line Facility Soils

ROD-OU4
Signed: July 7, 2006, LAAP-009 Soil Sites

ROD-OU5
Signed: September 20, 2007, LAAP-010 Installation-wide Groundwater

ROD-OU6
Signed: September 20, 2010, Military Munitions Response Areas

Remedies:

- Incineration of site wastes at Area P (responsibility of the U.S. Army).
- No further action for the seven-soil/source study areas.
- No further action for the Y-Line Facility soils.
- No further action for the LAAP-009 Soil Sites.
- Monitored Natural Attenuation / Long Term Monitoring at the Installation-wide units of concern.
- No further action for munitions response sites, other than continue implementation of land use controls (LUCs) as established in the 2005 transfer agreement.

Site Contacts

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